

REMARKS/ARGUMENTS

Favorable consideration of this Application, as presently amended and in light of the following discussion, is respectfully requested.

This Amendment is in response to the Office Action mailed on September 2, 2005. Claims 1-4 and 21-30 are pending in the Application, Claims 1-4 stand rejected, and Claims 5-20 have been withdrawn from consideration. Claims 1-4 are amended, Claims 5-20 are cancelled without prejudice or disclaimer, and new Claims 21-30 are added by the present Amendment.

Summarizing the outstanding Office Action, the abstract of the disclosure was objected to; Claims 1-4 were rejected under 35 U.S.C. §112, second paragraph, for being indefinite; Claims 1 and 4 were rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Ichikawa et al. (U.S. Patent No. 5,143,585, hereinafter "Ichikawa"); or Sakakura et al. (Japanese Patent No. 256221, hereinafter "Sakakura"); and Claims 2 and 3 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ichikawa or Sakakura in view of Nakahara et al. (U.S. Patent No. 6,348,135, hereinafter "Nakahara") or Sumi et al. (Japanese Patent No. 60-222105, hereinafter "Sumi") and Yoneda et al. (European Patent No. 827765, hereinafter "Yoneda").

Applicants regret the scheduling conflict that prevented Applicants to discuss this application with Examiner Virginia Manoharan after a personal interview had already been scheduled for the month of October 2005. Applicants reserve the right to request such an interview in case the present amendments and remarks do not place this application in condition for allowance.

In response to the objection to Applicants' abstract, Applicants have herein submitted a revised abstract to comply with that objection and respectfully request reconsideration of the same.

As to the claim rejection under 35 U.S.C. §112, Applicants note with appreciation the time taken by the Examiner to identify specific areas needing revisions. Applicants submit that the instant claim amendments have overcome this rejection and respectfully request its withdrawal. It is believed that all pending claims are definite and no further rejection on that basis is anticipated. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work with the Examiner in a joint effort to derive mutually acceptable language.

Turning to the anticipation rejection, Applicants respectfully submit that Claim 1 is not anticipated by either Ichikawa or Sakakura because each and every element as set forth in that claim is not found, either expressly or inherently described, in the cited references. In an anticipation rejection, the identical invention must be shown in as complete detail as is contained in the claim.¹

According to a feature of the invention as set forth in the presently amended Claim 1, a distillation apparatus is recited, comprising, among other features, a distillation column; a reflux tank having an inlet, an outlet and a vapor phase connecting port, the outlet being connected to the distillation column; a condenser having a condensing fluid inlet and a condensing fluid outlet, the condensing fluid inlet being supplied with fluid from the distillation column and the condensing fluid outlet being connected to the reflux tank inlet; a vacuum generator connected to the vapor phase connecting port of the reflux tank through an exhaust gas conduit of the vacuum generator; a pressure control valve connected to the exhaust gas conduit of the vacuum generator; and a pressure controller connected to the pressure control valve, the pressure controller having a pressure detection line.

¹ See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," (Citations omitted) (emphasis added). See also MPEP 2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art."

As disclosed in the Specification, conventional distillation devices are plagued with serious plugging problems, particularly those having a large-sized distillation column, as in commercial equipments. Non-limiting examples of the objectives of the instant invention include: (1) to provide an apparatus and a method for distilling and purifying a readily polymerizable compound stably over a long period of time; (2) to improve the above-noted plugging problems in conventional devices and to more easily recover readily polymerizable compound carried in an exhaust gas of a vacuum generator; and (3) to enable one to control inflow of polymers or polymerization inhibitor into a reboiler by a simple mechanism, thereby making it possible to continuously operating column equipment stably over a long period of time.²

Claim 1 has been amended to more clearly recite such an apparatus. Non-limiting support for the subject matter amended to Claim 1 is found at least in the originally filed drawings.

In Ichikawa, the vacuum pump 5 is connected directly to the emulsifying tank 1. In addition, Ichikawa is silent with respect to a reflux tank, a condenser connected as now recited in Claim 1, a control valve with a pressure controller, and the vacuum generator as recited. Thus, Ichikawa cannot support prima facie cases of anticipation or obviousness.

As to Sakakura, assuming that the gas-liquid separator 1 is a distillation column, the vacuum pump 1 is not connected to a reflux tank since none is disclosed. Also, Sakakura is silent with respect to the teaching or disclosure of a control valve with a pressure controller, and the vacuum generator as recited. Thus, Sakakura cannot support prima facie cases of anticipation or obviousness.

Accordingly, Applicants respectfully submit that Claim 1 is not anticipated by either Ichikawa or Sakakura. These cited prior art references do not disclose the features now

² Specification, pages 1-8.

recited in Claim 1. Claim 4 should be allowed, among other reasons, as depending either directly or indirectly from Claim 1, which should be allowed as just explained. In addition, Claims 4 is further considered allowable as it recites other features of the invention that are not disclosed, taught, or suggested by the applied reference when those features are considered within the context of the subject matter recited in independent Claim 1. Therefore, Applicants respectfully request that the anticipation and/or obviousness rejections of Claims 1 and 4 under 35 U.S.C. §§ 102 and/or 103 be withdrawn.

As to the obviousness rejection of Claims 1 and 3, Applicants respectfully submit that no motivation was provided to combine the cited references, as such, Applicants are unable to provide any remarks as to the merits of this rejection. The Office is respectfully reminded that the fact that recited features of an invention are found in different references is not sufficient to support a prima facie case of obviousness. The outstanding Office Action simply alleges that features missing from the primary references are found elsewhere. Applicants respectfully submit that such an approach is insufficient for the Office to carry its burden for a rejection under 35 U.S.C. § 103(a). Applicants respectfully request withdrawal of the rejection of Claims 2 and 3 under 35 U.S.C. § 103(a).

Finally, Applicants have submitted new Claims 21-30, which find non-limiting support on the subject matter recited in the originally filed claims and in Applicants' figures. Therefore, new Claims 21-30 are not believed to raise a question of new matter.³ Because Claims 21-30 incorporate by reference all of the features of Claim 1, in view of the above-presented remarks, Applicants respectfully submit that new Claims 21-30 should be allowed over the cited references.

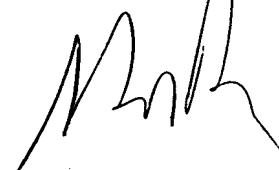
³ See MPEP 2163.06 stating that "information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter."

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-4 and 21-30 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representatives at the below listed telephone number.

Respectfully submitted,

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